California Environmental Protection Agency

⊘ Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0054-1
New Passenger Cars, Light-Duty Trucks and
Medium-Duty Vehicles
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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: The following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

						TEST GRO	UP II	NFOR	RMATION					
MOD YEA		TEST G	ROUP	VEHICLE CLASS(ES)					FUEL CATEGORY			FUEL TYPE		
201	16	GVGAV0:	1.4VUP			PC		DEDICATED SINGLE FUEL VEHICLE				GASOLINE		
	USEF	UL LIFE	(miles)		VEH	CLE EMISS	ON (CATE	GORY	II.	ITERIM / INT	ERME	DIA	TE IN-USE STD
EX	(H/ORV	R	EVAP		F	TP		SF	TP		FTP			SFTP
1	L20000		150000		LEV2	ULEV	1		2 SFTP NDARD		*			*
SP	PECIAL	FEATUR		HAUST	EMISSIC	N CONTRO			OBD S	TAT	US	ENG	INE	DISPLACEMENT (L)
1	WU-	IWC, IW	C, WR-F	102S, I	HO2S, DE	I, TC, CA	С		FULL		*			
*				*	-	, <i>i</i>		F	PARTIAL	ALL MODELS		1.4		
*		*							RTIAL WITH FINES		*			
			E	VAPOR	ATIVE & I	REFUELING	(EVA	AP/OF	RVR) FAMILY	INF	ORMATION			
EV	AP / OI	RVR FAI	VILY	EVAP	ORATIVE	STD CATE	SORY	RY EVAP EMISSION STD SUBJECT STORTS			SPE	CIA	L FEATURES	
	GVGAR	0110VB	D		LF	2V 2		PC *				*		
					Е	MISSION CE	REDI	TINF	ORMATION					
		ALLOW	VANCE F	OR TES	T GROUP	>			G CREDIT FO		NMOG CR		OR	OPTIONAL EXH STD FOR WORK
BAS	BASELINE PZEV AT PZEV TZEV				N	JN-P4	ZEV ZERO-E	VAP	DC)K		TRUCKS		
* * *							N		N	ī		N		
					NMOG	AND FLEET	AVE	RAG	E INFORMA	TION	1			
NMO	G RAF	CH4 R	AF FT	P NMOC RAT	G/NMHC HCHO/NMHC		HC F	RATIC	NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)		750 LVW)	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		
1	.00	*		1.0	4	0.0	030			0.0	93	0.110		

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

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BE IT FURTHER RESOLVED:

The exhaust and evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

For the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

This Executive Order hereby supersedes Executive Order A-413-0054 dated July 24, 2015.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

FUEL TYPE

1 12 July 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											
		NMOG (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.0140	0.040	0.23	1.7	0.021	0.05	*	8	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0214	0.055	0.41	2.1	0.030	0.07	*	11	0.001	0.01
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.0569	0.080	0.51	1.7	0.017	0.05	1.6	16		

	EUEL TYPE	NOx	(g/mi)	CO (g/mi)			
	FUEL TYPE	CERT	STD	CERT	STD		
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.008	0.07				
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.017	0.09				
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			0.94	10.0		

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		171 UF		US06		SC03	3	COMPOSITE		
	FUEL TYPE	F	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
	GASOLINE	CERT	0.020	1.51		0.024	0.19		4 a -	
@ 4K	- TIER 2 UNLEADED	STD	0.14	8.0	. 25	0.20	2.7			3 "
		CERT	*.	*	*	*	*	*	*	*
@ UL	*	STD	*	*	*	*	*	*	*	*
		BIN						*		2 3 7 3

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE	VEHICLE	EVAPORA"	TIVE TESTIN	NG		
EVAPORATIVE FAMILY	FUEL TYPE	3DHS	S (g/test) (@ UL	2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GVGAR0110VBD	GASOLINE-CA PHASE 2	0.264	0.50	*	0.254	0.65	*	0.00	0.05

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ORVR / FUI	ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
GVGAR0110VBD	GASOLINE - TIER 2 UNLEADED	0.01	0.20	*	*	*	*	*	*	*			

*: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; HDV: heavy-duty vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for spark-ignited engine; HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOx sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation: EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%" gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV continuously variable transmission, SCV: selectable continuously variable transmission, AM: automated manual transmission, AMS: automated manual-selectable transmission; OT: other transmission

	2016 MODEL YEAR: VEHICLE MODELS INFORMATION													
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE						
VOLKSWAGEN	JETTA	PC	1.4	M5,SA6	GVGAR0110VBD	1	P	*						